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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,810	06/22/2001	Sriram Rao	50269-0517	7621
29989	7590	02/08/2006	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 2055 GATEWAY PLACE SUITE 550 SAN JOSE, CA 95110			MAIS, MARK A	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,810

Applicant(s)

RAO, SRIRAM

Examiner

Mark A. Mais

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7-19 and 22-32 is/are allowed.
- 6) ☒ Claim(s) 5, 6, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 10, 2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 5, 6, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Viswanadham et al. (USP 6,424,659).

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4. With regard to claims 5 and 20, Viswanadham et al. discloses a machine-implemented method of, and a computer-readable medium carrying one or more sequences of instructions for sending packets wherein execution of the one or more sequences of instructions by one or more processors causes the one or more processors to perform the steps of: communicating from an application to hardware a policy for manipulating packets wherein the policy specifies at least one of (a) redirection needs of the application [packets are directed from a receive ports to a transmit ports (col. 11, lines 47-53) via forwarding block/transmit queue management block, col. 11, lines 28-35; routing information is determined from the packet headers (e.g., col. 21, line 61 to col. 22, line 3)] (b) replication needs of the applications [inherently, the packets are replicated when either a broadcast or multicast command is used in the switch, *see also* col. 3, lines 54-56] (c) packet aggregating needs of the application [individual packets are received via the receive buffers in 64-byte slices with start-of and end-of-frame signaling, col. 7, line 32 to col. 8, line 3; serviced in a time-division-multiplexed manner, col. 7, lines 26-32; it is inherent that groupings of packets can be bigger or smaller than the 64 bytes slices, but the packets must be reconstituted in the correct order for unicast/multicast/broadcast to the respective ports via the FE, *see also* col. 24, lines 6-10 and col. 21, lines 43-45] and (d) packet splitting needs of the application [dynamic routing, per-port multicast/broadcast, col. 2, lines 60-65]; and in the hardware [Fig. 10A, hardware block, col. 15, lines 49-51], modifying the packets based on the policy without intervention of the application [QOS provisioning, col. 3, lines 1-4; *see also* routing support versus configuration support wherein routing tables are updated using RIP, but RIP does not

perform the configuration support (e.g., port-by-port enabling/disabling), col. 2, lines 56-67].

5. With regard to claims 6 and 21, Viswanadham et al. discloses that the hardware is a router **[switch/router 20, which performs layers 2 & 3 packet delivery; *see also* col. 3, lines 10-14].**

Response to Arguments

6. Applicant's arguments filed November 10, 2005 have been fully considered but they are not persuasive.

7. Applicant's representative argues that, for claims 5 and 20, Viswanadham et al. does not disclose, teach, or suggest communicating a policy from an application to hardware. However, this is inherently the function of a router. A router routes packets based on programmable/dynamic packet routing policies/rules. The router can use routing information sent, for example, using an application such as a routing protocol [e.g., RIP] to update a routing table, wherein the router then sends the packets to their appropriate addresses without the intervention of the routing protocol application [using only the updated routing table]. As noted above, RIP does not perform the configuration support (e.g., port-by-port enabling/disabling) **[col. 2, lines 56-67].**

Allowable Subject Matter

8. Claims 1-4, 7-19, and 22-32 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

The examiner has not found a routing method which communicates from an application to an operating system, a policy for manipulating packets [redirect, replication, packet aggregation, and packet splitting], wherein packets are modified at the operating system level without intervention of the application.

Conclusion

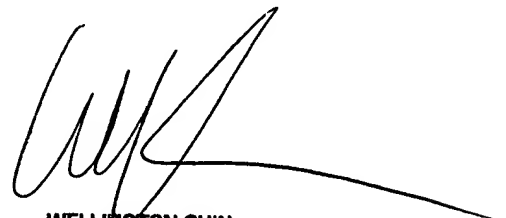
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Mais whose telephone number is (571) 272-3138. The examiner can normally be reached on 6:00-4:30.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 2, 2006



WELLINGTON CHIN
SENIOR PATENT EXAMINER